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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,623	10/05/2000	Maki Yukawa	2257-163P	8138

7590 06/23/2006  
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PO Box 747  
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EXAMINER

TRAN, KHANH C

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/679,623

Applicant(s)

YUKAWA, MAKI

Examiner

Khanh Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6,8 and 13-15 is/are allowed.
- 6) ☒ Claim(s) 3,4 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The Amendment filed on 04/13/2006 has been entered. Claims 3-6 and 8-15 are pending in this Office action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 3-6 and 8-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagata et al. U.S. Patent 6,643,449 B1.

Regarding claim 3, FIG. 2 is a block diagram showing an embodiment of a recording/reproducing apparatus including a recording/reproduction control

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section 29, recording device data demultiplexing section 23, PES producing section, video decoder 8 and audio decoder 9; see column 4 lines 40-68.

The recording/reproducing control section 29, corresponding to the claimed parameter set portion, set a recording mode in response to operational signal issued by the user; see column 4 lines 55-67. The operational signal such as a user channel switching signal cause the PCR (Program Clock Reference) value becomes discontinuous; see column 7 lines 50-60. In light of the aforementioned teachings, the recording/reproducing control section 29 monitors and detects a discontinuity of the PCR in response to operational signal issued by the user as claimed in the application claim. The act of detecting a discontinuity of the PCR corresponds to the claimed detecting presence/absence of discontinuity of the PCR.

When a discontinuity indicator (discontinuity\_indicator) (a flag taking an active condition when a counter for packets with the same PID value becomes discontinuous; see ISO/IEC13818-3) for a packet including a PCR comes to 1 during that GOP period, or when the PID to be demultiplexed by an operational signal such as a user channel switching signal is altered so that the PCR value becomes discontinuous, the PCR at that time is also written in the table file 27; see column 7 lines 45-60. In addition to the PCR, the video data and the audio data, section data such as a PAT and a PMT (see ISO/IEC13818-1) are recorded simultaneously. The PAT describes the PID value of the PMT existing at every channel, while the PMT describes the PID values of the PCR, the picture and the voice in that program.

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In column 8 lines 30-67, at the example of FIG. 4, at the start of reproduction, the recording/reproduction control section 29 reads out the picture and voice PID values from the table file 27 to obtain the PID values and sets them in the recording device data de-multiplexing section 23, which corresponds to the claimed signal extraction portion. The recording device data de-multiplexing section 23 demultiplexes the inputted bit stream to supply it to the selecting circuit 2. The picture and voice PID values from the table file 27 correspond to the claimed signal extraction value. In light of the foregoing discussion, the channel parameter includes the PCR, PMT, PAT picture and voice PID values.

Regarding claim 4, claim 4 is rejected on the same ground as for claim 3 because of similar scope. Furthermore, in column 7 lines 45-60, Nagata et al. teaches that in the case of using the PCR, when a discontinuity indicator (discontinuity\_indicator) (a flag taking an active condition when a counter for packets with the same PID value becomes discontinuous; see ISO/IEC13818-3) for a packet including a PCR comes to 1 during that GOP (group of pictures) period. In another word, when the PCR becomes discontinuous, the PCR is unreceivable during that GOP (group of pictures) period, corresponding to the claimed predetermined time.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. U.S. Patent 6,643,449 B1 in view of FIG. 22 admitted prior art.

Regarding claim 9, claim 9 is rejected on the same ground as for claim 1 because of similar scope. Furthermore, referring to figure 2, the recording/reproducing apparatus, including a recording device 26, receives an externally transport stream at input 1 and produces video signal and audio signal as a digital broadcast signal for reproduction. In column 7 lines 35-65, the desired TS packet depending upon the user's operation is recorded as the bit stream file 28, while the time information on the GOP head timing and the information on the number of GOP packets are recorded as the table file 27. Nagata et al. further teaches the use of the value of a timer in the receiving unit, as the time information to be recorded as the table file 27. In the case of using the PCR, when a discontinuity indicator (discontinuity\_indicator) (a flag taking an active condition when a counter for packets with the same PID value becomes discontinuous; see ISO/IEC13818-3) for a packet including a PCR comes to 1 during that GOP period, or when the PID to be demultiplexed by an operational signal such as a user channel switching signal is altered so that the PCR value

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becomes discontinuous, the PCR at that time is also written in the table file 27. In column 7 lines 55-67, a data packet describing control data for indicating the fact that a discontinuity takes place at such a discontinuous point, the demultiplexing/GOP head detecting section 22 multiplexes that data packet to record it in the bit stream file 28. In view of the foregoing teachings, the discontinuity indicator (a flag taking an active condition when a counter for packets with the same PID value becomes discontinuous) corresponds to the claimed discontinuity flag. The operational signal from user would stop the recording of the transport stream. At the start of reproduction, the recording/reproduction control section 29 reads out the picture and voice PID values from the table file 27 to obtain the PID values and sets them in the recording device data demultiplexing section 23. The recording/reproduction control section 29 sets, in the STC counter 25, a PCR value in a packet, coinciding with the PID of the initial PCR.

Nagata et al. does not, however, shows a discontinuity flag adding part adding a discontinuity flag as claimed in the application claim.

FIG. 22 admitted prior art teaches a discontinuity information generator 125. Because Nagata et al. teaches utilization of discontinuity indicator (discontinuity\_indicator) (a flag taking an active condition when a counter for packets with the same PID value becomes discontinuous), it would have been obvious for one of ordinary skill in the art at the time the invention was made that Nagata et al. recording/reproducing apparatus can be modified to include the discontinuity information generator 125 as taught by FIG. 22 admitted prior art.

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Regarding claim 10, claim 10 is rejected on the same ground as for claim 9 because of similar scope.

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al. U.S. Patent 6,643,449 B1.

Regarding claim 11, claim 11 is rejected on the same ground as for claim 10 because of similar scope. Nagata et al. teaches that in column 19 lines 35-65, in the case of performing a speed-increasing reproduction such as the fast-forward reproduction, there is a need to gain access to the I picture with high efficiency. Nagata et al. further discusses that according to the access means disclosed in Japanese Unexamined patent Publication No. 8-273296, an ID (Identifier) is given to each of frames of compressed and encoded video data to establish the corresponding relationship between the ID and the recorded position of the frame on a record medium so that the position, on the record medium, of the frame to be accessed at a special reproduction can easily be specified. Because of the need to gain access to the I picture with high efficiency for performing a speed-increasing reproduction such as the fast-forward reproduction, one of ordinary skill in the would have been motivated to modify Nagata et al. teachings to implement the access means as taught in Japanese Unexamined patent Publication No. 8-273296. Therefore, an ID adding portion can be implemented in Nagata et al. to add the ID.



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Regarding claim 12, claim 12 is rejected on the same ground as for claim 11 because of similar scope.

***Allowable Subject Matter***

6. Claim 5 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, claim 5 is allowed over prior art of record because the cited references cannot teach or suggest "said parameter set portion is configured to monitor a result of decoding by said decoding portion, while said predetermined criterion includes presence/absence of error occurrence in said result of decoding".

7. Claims 6 and 8 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, claim 6 is allowed over prior art of record because the cited references cannot teach or suggest "said parameter set portion is configured to previously recognize an end time of a currently received program from said EPG, while said predetermined criterion includes whether or not reaching said end time of said program".

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8. Claims 13-15 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 13, claim 13 is allowed over prior art of record because the cited references cannot teach or suggest “said information table includes: a current program information table corresponding to a currently broadcasted program” and “a next program information table corresponding to a program broadcasted next, and wherein, said parameter set portion previously performs temporary set processing extracting said next program information table from said digital broadcast signal and temporarily setting a program parameter described in said next program information table as a next program parameter” and “monitors the contents of said current program information table while said predetermined criterion includes whether or not the contents of said current program information table change to the contents of said next program information table, and performs real set processing setting temporarily set said next program parameter as said signal extraction parameter when the contents of said information table change”.

### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Sato et al. U.S. Patent 5,991,832 discloses "EPG Apparatus And Its Control Method".

Furuyama U.S. Patent 7,024,100 B1 discloses "EPG Apparatus And Its Control Method".

Christine et al. U.S. Patent 6,516,376 B1 discloses "Command And Control Architecture For A Video Decoder And A Host".

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

Phancong Tran

06/21/2006

Primary Examiner KHANH TRAN